

REMARKS

Applicants have carefully reviewed the Office Action dated July 7, 2003. Applicants have cancelled Claims 16-20. Applicants have amended Claims 21 and 27 to more clearly point out the present inventive concept. Reconsideration and favorable action is respectfully requested.

Claims 21-32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Keeler et al.*, U.S. Patent No. 6,002,839. This rejection is respectfully traversed.

Applicants' present inventive concept, as defined by the amended claims, is directed toward utilization of a neural network model to populate an output column associated with the results based upon input data, which input data in a document such as a spreadsheet is utilized with a known relationship to provide an output result, the actual column being defined by that output result. Rather than go through the actual processing of the relationship, a neural net or other such non-linear model, is used to model this representation. Note that the given set of inputs is tightly coupled to the output of results. There are few, if any, dependencies upon other inputs, *i.e.*, the output is directly related to a fixed number of inputs and no others depending upon the relationship and, also depending upon the relationship, all of these inputs must be received in order to provide a reasonably accurate prediction of an output result.

The *Keeler et al.* reference is a general neural net that provides for the training of a model on a plurality of inputs and a plurality of outputs that exist in a historical dataset. These inputs and outputs have relationships with each other, but they are not well defined. It is the replacement of a fixed finite relationship between inputs and outputs with a model thereof that actually introduces error into the calculation that distinguishes Applicants' present inventive concept from the *Keeler et al.* reference. The *Keeler et al.* reference does not suggest that a known relationship be substituted with a predictive relationship, since errors are actually introduced into the system. The reason for doing this, as set forth in Applicants' specification, is that the neural net function may be faster than that associated with

AMENDMENT AND RESPONSE

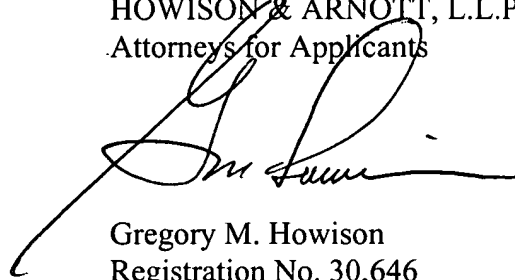
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processing a complex algorithm, *albeit* a known complex algorithm. Therefore, Applicants respectfully request that the 35 U.S.C. § 102 rejection with respect to Claims 21-32 be withdrawn.

Applicants have now made an earnest attempt in order to place this case in condition for allowance. For the reasons stated above, Applicants respectfully request full allowance of the claims as amended. Please charge any additional fees or deficiencies in fees or credit any overpayment to Deposit Account No. 20-0780/PAVI-25,759 of HOWISON & ARNOTT, L.L.P.

Respectfully submitted,
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